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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,218	03/16/2001	David Bongfeldt	9-15000-1US	5711

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OGILVY RENAULT LLP  
1981 MCGILL COLLEGE AVENUE  
SUITE 1600  
MONTREAL, QC H3A2Y3  
CANADA

EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/809,218

Applicant(s)

BONGFELDT ET AL.

Examiner

Philip J. Sobutka

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 36 is/are allowed.
- 6) ☒ Claim(s) 34 and 37 is/are rejected.
- 7) ☒ Claim(s) 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 34,37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 6,690,915).

Consider claim 37. Ito teaches a repeater adapted to transparently mediate RF signal traffic between a wireless communications device (Ito fig 1, item 190) and a wireless communications network (Ito fig 1, items 180,182), the repeater comprising: a first antenna unit adapted to maintain a network link with a transceiver of the wireless communications network (Ito fig 1, item 130); and a second antenna unit coupled to the first antenna unit and adapted to maintain a local link with the wireless communications

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device within a local coverage area of the repeater (Ito fig 1, item 132), the second antenna unit comprising an integral RF signal processor adapted to selectively amplify respective up link and downlink RF signals of the wireless communications device (Ito see especially fig 1, item 100), wherein the signal processor comprises uplink and downlink signal paths, a detector to detect at least one of the uplink and downlink RF signals (Ito see especially col 3, lines 40-45, col 11, lines 63-67), and a controller to control gain of the uplink and downlink paths, comprising a controller (Ito fig 1, item 112) to generate a control signal in response to at least the detected signal and a gain control block (Ito, fig 1 items 108,110,114,116, col 11, lines 15-45) in each of the uplink and downlink paths. Ito lacks a teaching of the controller being a digital micro-controller. Official Notice is taken that it is notoriously well known in the art to use micro controllers in order to perform operation control in a small size package. Therefore it would have been obvious to one of ordinary skill in the art to modify Ito to use a micro controller in order to perform operation control in a small sized package.

As to claim 34, note that gains are respectively controlled for uplink and downlink paths (Ito col 12, lines 33-35).

### **Response to Arguments**

4. Applicant's arguments with respect to claims 34,37 have been considered but are moot in view of the new ground(s) of rejection.

### **Allowable Subject Matter**

5. Claim 36 is allowed for the reason applied to objected-to claim 32 in the previous action.

6. Claims 35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 35. The nearest prior art as shown in Ito fails to teach the repeater of claim 37 wherein the digital micro controller is adapted to control the gain of the downlink path in a accordance with a power level of the RF signal detected in the uplink path, whereby a converge area of the repeater is dynamically adjusted in accordance with at least a distance between the repeater and the WCD.

### **Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay can be reached on 571-272-7882. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip Sobutka  
(703) 305-4825

May 23, 2005

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER